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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/998,979	10/31/2001	John A. Schlack	T734-10	7793

27832 7590 05/26/2006

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EXAMINER

CHOWDHURY, SUMAIYA A

ART UNIT PAPER NUMBER

2623

DATE MAILED: 05/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/998,979

Applicant(s)

SCHLACK ET AL.

Examiner

Sumaiya A. Chowdhury

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-85 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17, 22-85 is/are rejected.
- 7) ☒ Claim(s) 18-21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 11-10-04, 11-8-04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

***Allowable Subject Matter***

1. Claims 18-21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Claim Objections***

2. Claims 31-33, and 38 are objected to because of the following informalities:

In claims 31-33, 35-36 "The method of claim 5" should be changed to –The method of claim 4--.

In claim 38, "The method of claim 5" should be changed to –The method of claim 1--.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 3-10, 12-14, 17, 22-25, 27-30, 35-41, 43-45, 55, 59-66, 68-71, 73-83, and 85 are rejected under 35 U.S.C. 102(e) as being anticipated by Labeeb.

As for claim 1, Labeeb discloses a method for profiling a plurality of identities of a television viewing audience based on the interactivity of the identities with a television, the method comprising:

monitoring user interactions with the television – ([0214], [0233] – lines 6-11, [0114] – lines 10+);

filtering the user interactions into at least one interaction category (Movie, Adventure, Sports – Fig. 4, [0076], [0087]);

processing (analyzing) each of the at least one interaction categories in order to create at least one category profile (categorize programs into Movies, Adventure, Sports, etc.) for each associated category wherein each of the at least one category profiles identify attributes (“trait-ness” – [0076]) about the user for that category of interaction – ([0076], [0087]); and

generating an interaction profile (Fig. 4) by combining all of the category profiles (Referring to Fig. 4, all of the category profiles are combined to create an interaction profile about the user. – [0076], [0087])

As for claims 3 and 62, Labeeb discloses:

wherein said monitoring includes monitoring time associated with each of the user interactions – (viewing times [0076] – lines 10+,[0220]; [0051]); and

said processing includes processing at least some subset of data from at least some subset of the at least one interaction category with respect to time in order to create at least one category profile – ([0091], [0076]).

As for claim 4, Labeeb discloses wherein the at least one category profile includes at least some subset of channel viewing duration, channel dwell time, channel change frequency and channel selects. (Fig. 37, channel selects – [0220], channel viewing time [0220], channel change frequency [0220])

As for claims 5 and 63, Labeeb discloses:

Means (100 – Fig. 2) for detecting an initiation of a television viewing session (After detecting a power-on event, the system knows that a viewing session has now been initiated - [0378], [0459]);

Means (100 – Fig. 2) detecting a termination of the television viewing session (Referring to paragraph [0214], the end of a viewing session is when inactivity is detected),

wherein said means (100 – Fig. 2) for monitoring, said means (100 – Fig. 2) for filtering, said means (100 – Fig. 2) for processing and said means (100 – Fig. 2) for generating are continually performed for the television viewing session in order to generate a session profile ([0216], [0219] – [0220]).

As for claims 6 and 64, Labeeb discloses generating a signature profile (profile for each user) based on the session profile – (Fig. 35, [0211], [0214]).

As for claim 7, Labeeb discloses comprising storing the signature profile (The profile for each user is stored such that the system can determine the viewer the next time the viewer views a program. – [0225], [0105]).

As for claim 8, Labeeb discloses said generating a signature profile includes correlating the session profile to a plurality of pre-existing signature profiles (Fig. 35, [0214] – page 17).

As for claim 9, Labeeb discloses said correlating includes correlating at least a portion of the category profiles that make up the session profile with corresponding portions of category profiles that make up the plurality of pre-existing signature profiles ([0214] – page 17).

As for claim 10, Labeeb teaches correlating at least a portion of the category profiles includes applying weighting factors to the category profiles (Fig. 4 ,6, 20, [0113]).

As for claim 12, Labeeb discloses wherein said generating a signature profile further includes determining if the session profile satisfies a correlation threshold with at least one of the pre-existing signature profiles - [0114], line 8+, [0530].

As for claim 13, Labeeb teaches that said generating a signature profile further includes selecting the pre-existing signature profile having highest correlation value over the correlation threshold; - [0530]

updating the selected pre-existing signature profile to include the session profile – [0114], line 8+.

As for claim 14, Labeeb teaches wherein said updating includes updating the selected pre-existing signature profile by adding the session profile on a time weighted basis – [0114], line 8+.

As for claim 17, Labeeb discloses wherein said updating is done once the viewing session has been terminated (After the viewing session is terminated, the system tries to determine who the viewer was and then updates the viewer profile – [0114], line 8+).

As for claim 22, Labeeb teaches wherein said generating a signature profile further includes making the session profile a new signature profile when the session profile does not satisfy the correlation threshold with any of the preexisting signature

profiles. In Labeeb's method, to identify a user automatically, the error value between predicted and actual is computer for all viewers. Therefore, when there is a new user, there will be a high error value from which the system will determine that a new profile needs to be created for the new viewer – [0114].

As for claim 23, Labeeb discloses determining whether the session profile satisfies a minimum session threshold; and discarding the session profile when the viewing session profile does not satisfy the minimum session threshold – ([0214], line 13+).

As for claim 24, Labeeb discloses wherein the minimum session threshold is a minimum session duration ([0214], line 13+).

As for claim 25, Labeeb fails teaches:

ranking the pre-existing signature profiles based on viewing attributes, when total number of viewing signature profiles stored exceeds a pre-determined maximum number; and

discarding lowest ranked pre-existing signature profile

Labeeb teaches deleting entries if it is determined that there is no room to store additional entries – [0110] – [0111].



As for claim 27, Labeeb teaches wherein the pre-existing signature profiles are created and stored independently of any session profiles of the television household audience. Initially, the pre-existing signature profiles are created and stored. After each session profile, the session profile is correlated with the pre-existing signature profile and aggregated to the pre-existing signature profile with which it matches - [0114], [0214]-[0216].

As for claim 28, Labeeb discloses wherein the at least one category profile is a viewing duration profile identifying various viewing duration attributes for the viewing session ([0051], [0076], [0091]).

As for claim 29, Labeeb discloses wherein the various viewing duration attributes include at least some subset of viewing duration by day ([0076]), viewing duration by day-part ([0091], line 19+), source network viewing duration ([0087]), program genre viewing duration ([0066]), and program viewing duration ([0051]).

As for claim 30, Labeeb discloses wherein the at least one category profile is a channel change frequency profile identifying various channel change frequency (rate of channel change) attributes for the viewing session – [0220].

As for claim 35, Labeeb discloses wherein the at least one category profile is delineated by day - [0076].

As for claim 36, Labeeb discloses wherein the at least one category profile is a probable demographic trait profile predicting various demographic attributes associated with users during the viewing session – [0115], [0117], [0126]-[0128].

As for 37, Labeeb teaches wherein the probable demographic trait profile identifies attributes including at least some subset of probable gender, probable age, probable income-level, and probable ethnicity – [0116], [0117], [0126]-[0128].

As for claim 38, Labeeb teaches wherein the user interactions include at least a subset of channel changes ([0220], lines 15+) and volume changes ([3009] – [3010]).

As for claim 39, Labeeb teaches wherein said detecting an initiation includes detecting a television power-on event as the initiation of the television viewing session – (After detecting a power-on event, the system knows that a viewing session has now been initiated - [0378], [0459]).

As for claim 40, Labeeb teaches said detecting an initiation includes detecting interactivity of the television viewing audience with the television as the initiation of the television viewing session – (Referring to paragraph [0214], a usage session (viewing session) is the period during which there are user activities between two periods of

inactivity, or the period during which the device is used between two periods during which the device is not in use.).

As for claim 41, Labeeb teaches that said detecting an initiation includes detecting a predetermined event (television interaction) as the initiation of the television viewing session – (Referring to paragraph [0214], a usage session (viewing session) is the period during which there are user activities between two periods of inactivity, or the period during which the device is used between two periods during which the device is not in use.).

As for claim 43, Labeeb teaches said detecting a termination includes detecting a television power-off event as the termination of the television viewing session – [0379].

As for claim 44, Labeeb teaches wherein said detecting a termination includes detecting inactivity of the television viewing audience with the television as the termination of the television viewing session – (Referring to paragraph [0214], the end of a viewing session is when inactivity is detected).

As for claim 45, Labeeb teaches wherein said detecting a termination includes detecting a predetermined event (inactivity) as the termination of the television viewing session – [0214].

As for claim 59, Labeeb teaches retrieving data associated with at least a subset of the user interactions, wherein said filtering includes filtering the user interactions into the at least one interaction category based at least in part on the associated data (The data is filtered into program genres watched by the user such as Adventure and Sports – [0076], [0087]).

As for claims 60 and 82, Labeeb teaches wherein the retrieved data includes at least some subset of programs (MAD ABOUT YOU), networks (NBC), program genre (COMEDY)- (Fig. 4, [0076]).

As for claim 61, Labeeb discloses a system for profiling a plurality of identities of a television viewing audience based on the interactivity of the identities with a television, the system comprising:

Means (110 – Fig. 2) for monitoring user interactions with the television– ([0214], [0233] – lines 6-11, [0114] – lines 10+);

means (702 - Fig. 34) for filtering the user interactions into at least one interaction category - (Movie, Adventure, Sports – Fig. 4, [0076], [0087]);

means (702 - Fig. 34) for processing (analyzing) each of the at least one interaction categories in order to create at least one category profile (categorize programs into Movies, Adventure, Sports, etc.) for each associated category wherein each of the at least one category profiles identify attributes (“trait-ness” – [0076]) about the user for that category of interaction – [0076], [0087].

means (702 - Fig. 34) for generating an interaction profile (Fig. 4) by combining all of the category profiles - (Referring to Fig. 4, all of the category profiles are combined to create an interaction profile about the user. – [0076], [0087]).

Claim 65 contains the limitations of claims 8, 12, and 13 and is analyzed as previously discussed with respect to those claims.

As for claims 66 and 83, Labeeb discloses a system for generating a profile for an entity interacting with a television based on one or more interactions of the entity with the television, the system comprising:

means (100 – Fig. 2) for monitoring interactivity of the entity with the television - ([0214], [0233] – lines 6-11, [0114] – lines 10+);

means (100 – Fig. 2) for retrieving data (program genre) associated with at least some subset of the interactivity – ([0214]);

means (100 – Fig. 2) for organizing the interactivity into interactivity categories based at least in part on the retrieved data - (Movie, Adventure, Sports – Fig. 4, [0076], [0087]);

means (100 – Fig. 2) for generating the profile based at least in part on the interactivity categories. - (Referring to Fig. 4, all of the category profiles are combined to create an interaction profile about the user. – [0076], [0087])

As for claim 68, Labeeb teaches wherein the interactivity categories include at least some subset of channels, networks, and programs – (Fig. 3 and Fig. 4, [0220]).

As for claim 69, Labeeb teaches wherein the interactivity categories are segregated by day part – ([0076]).

As for claim 70, Labeeb teaches the profile captures viewing habits for the entity – (Fig. 4, [0076]).

As for claim 71, Labeeb teaches the viewing habits include entity preferences (trait-ness) for at least some subset of channels, networks, program genre, and programs - (Fig. 4, [0076]).

As for claim 73, Labeeb teaches the viewing habits include at least some subset of channel change frequency ([0220]) and channel change order ([0220]).

As for claim 74, Labeeb teaches wherein the viewing habits are broken out by day part – [0076].

As for claim 75, Labeeb teaches wherein the profile predicts demographic traits associated with the entity - [0116].

As for claim 76, Labeeb teaches wherein the demographic traits are in the form of probabilistic determinations. Based on the viewing statistics, the method of Labeeb guesses who is using the system and then provides targeted advertising based on the demographics of the user. ([0115] - [0116], [0140], [0148], [0227] - line 14+)

As for claim 77, Labeeb teaches wherein the demographic traits are generated by applying heuristic rules to the interactivity categories. A user profile database tracks users preferred channels and determine whether a viewer is a child or an adult and restricts advertisements to toys and cereals for a child and automobiles and appliances for an adult – ([0115] - [0116], [0227] - line 14+). Clearly, some heuristic rules associated with the viewing characteristics are being retrieved and applied to the viewing characteristic in order to determine whether a viewer is a child or an adult. The rules clearly predict traits not related to the viewing characteristics about a subscriber since the method predicts that a child would like toys and cereals and an adult would like cars and appliances.

As for claims 78 and 79, Labeeb teaches delivering specific content (advertisements) to the entity based on the profiles – ([0227]).

As for claim 80, Labeeb teaches comparing the profile to a plurality of signatures that better defines attributes associated with the entity ([0223], [0214] – page 17).

As for claim 81, Labeeb teaches wherein each of the plurality of signatures are a compilation of associated profiles generated from previous interactions with the television – (user action history database; [0214] - [0215])

As for claim 85, Labeeb teaches wherein said means for generating the profile applies heuristic rules to the interactivity categories in order to generate a demographic profile that predicts demographic traits associated with the entity. Labeeb teaches that a viewer's demographics are guessed such as whether the viewer is a child or an adult as discussed above. Therefore, heuristic rules are applied to determine the demographics traits associated with the user in order to provide targeted advertising.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2 and 67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Labeeb as applied to claim 1/66 above, and further in view of Alexander (6177931).



As for claim 2, Labeeb discloses wherein the at least one interaction category includes at least some subset of channels (channel names – [0220]) and volume levels (Labeeb doesn't disclose that the interaction category for television programs include volume levels but does disclose the interaction category for commercials include volume levels – [3009], [3010]).

In an analogous art, Alexander teaches wherein the viewing habits include channel change order and volume levels for the advantage of collecting profile information about the user – col. 28, lines 29-50.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Labeeb's invention to include wherein the viewing habits include channel change order and volume levels, as taught by Alexander, for the advantage of collecting profile information about the user.

As for claim 67, Labeeb teaches monitoring at least some subset of channel change activity (channel names – [0220]), volume control activity, and EPG activity - (Labeeb doesn't disclose that the interaction category for television programs include volume levels but does disclose the interaction category for commercials include volume levels – [3009], [3010]).

In an analogous art, Alexander teaches wherein the monitoring include channel change order, volume levels, and EPG use for the advantage of collecting profile information about the user – col. 28, lines 29-50.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Labeeb's invention to include wherein the monitoring include channel change order, volume levels, and EPG use, as taught by Alexander, for the advantage of collecting profile information about the user.

7. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Labeeb as applied to claim 13 above, and further in view of Chaney (5841433).

As for claims 15, Labeeb fails to teach that said updating is done at a predetermined time interval.

In an analogous art, Chaney teaches wherein updating is done at a predetermined time interval in order to update the system as necessitated – col. 3, lines 60-67.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Labeeb's invention to include wherein updating is done at a predetermined time interval, as taught by Chaney, for the advantage of updating the system as necessitated.

8. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Labeeb as applied to claim 25 above, and further in view of Bedard (5801747) and Shah-Nazaroff (6317881).

As for claim 26, Labeeb fails to teach wherein the viewing attributes include at least a subset of total viewing duration and recency of signature profile modification.

In an analogous art, Bedard teaches wherein the viewing attributes includes recency of signature profile modification (col. 5, line 59 – col. 6, lines 8).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Labeeb's invention to include wherein the viewing attributes includes recency of signature profile modification, as taught by Bedard, for the advantage of deleting profiles which belong to users that do not use the system in order to conserve memory.

In an analogous art, Shah-Nazaroff teaches wherein the viewing attribute includes viewing duration in order to provide useful information to service providers—col. 4, lines 5-13.

However, Labeeb and Bedard fail to teach that the viewing attribute includes total viewing duration.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Labeeb and Bedard's invention to include wherein the viewing attribute includes viewing duration, as taught by Shah-Nazaroff, for the advantage of providing useful information to service providers.

9. Claims 31-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Labeeb as applied to claim 4 above, and further in view of Cottam (6049695).

As for claim 31, Labeeb fails to disclose wherein the at least one category profile is a holding factor profile identifying various holding factor attributes for the viewing session.

In an analogous art, Cottam teaches identifying the channel viewed and the approximate length of time the channel is viewed – col. 6, lines 54-58.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Labeeb's invention to include identifying the channel viewed and the approximate length of time the channel is viewed, as taught by Cottam, for the advantage of tracking how long a viewer viewed a program.

As for claim 32, Labeeb fails to disclose wherein the at least one category profile is a dwell time profile identifying various dwell time factor attributes for the viewing session.

In an analogous art, Cottam teaches identifying the approximate length of time spent on viewing a program – col. 6, lines 54-58.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Labeeb's invention to include identifying the approximate length of time spent on viewing a program, as taught by Cottam, for the advantage of tracking how long a viewer viewing a program.

10. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Labeeb as applied to claim 4 above, and further in view of Aras (5872588).

As for claim 33, Labeeb teaches wherein the at least one category profile is a surf profile identifying various surfing attributes for the viewing session.

In an analogous art, Aras teaches wherein the user's surfing is monitored and logged for the advantage of sociological or marketing studies or for allocating bandwidth to the upstream channel – col. 20, lines 41-52.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Labeeb's invention to include wherein the user's surfing is monitored and logged, as taught by Aras, for the advantage of sociological or marketing studies or for allocating bandwidth to the upstream channel.

11. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Labeeb and Aras as applied to claim 33 above, and further in view of Alexander (6177931).

As for claim 34, Labeeb and Aras fail to disclose wherein the surf profile identifies attributes including at least some subset of network surfing, channel surfing, and EPG surfing.

In an analogous art, Alexander discloses that the EPG records channels surfing and EPG surfing for the advantage of collecting profile information about the user – col. 28, lines 29-45.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Labeeb and Aras' invention to include that the EPG

records channels surfing and EPG surfing, as taught by Aras, for the advantage of collecting profile information about the user.

12. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Labeeb and Chaney as applied to claim 15 above, and further in view of Kiewit (4,930,011)..

As for claims 16, Labeeb fails to teach that the predetermined event is an end of day part.

In an analogous art, Kiewit teaches that the predetermined event is at a particular time in order for the system to perform a function at that particular time – col. 5, lines 59-65.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Labeeb's invention to include that the predetermined event is at a particular time, as taught by Kiewit, in order for the system to perform a function at that particular time.

13. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Labeeb as applied to claim 41 above, and further in view of Kiewit (4,930,011).

As for claims 42, Labeeb fails to teach that the predetermined event is a day or day-part transition.

In an analogous art, Kiewit teaches that the predetermined event is at a particular time in order for the system to perform a function at that particular time – col. 5, lines 59-65.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Labeeb's invention to include that the predetermined event is at a particular time, as taught by Kiewit, in order for the system to perform a function at that particular time.

14. Claims 11, 46-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Labeeb as applied to claim 8/5 above, and further in view of Zigmond (6698020).

As for claim 46, Labeeb fails to teach wherein said detecting a termination includes detecting that a different identity is interacting with the television as the termination of the television viewing session.

In an analogous art, Zigmond teaches that a user is identified by the data stored in the statistics collection location and by the computer-executable instructions for deriving or making a best estimate of the identity of the viewer based on current and past viewing habits – col. 9, line 65 – col. 10, line 3.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Labeeb's invention to include that a user is identified by the data stored in the statistics collection location and by the computer-executable

instructions, as taught by Zigmond, for the advantage of deriving or making a best estimate of the identity of the viewer.

As for claim 47, Labeeb and Zigmond disclose the claimed limitations. In particular, Zigmond teaches wherein said detecting that a different identity is interacting with the television includes detecting when current interactions with the television deviate from the session profile generated to that point in the session. Zigmond teaches that a best estimate of the identity of the user is made based on current and past viewing habits. Therefore, the system is capable of determining that the current user is different from the previous user based on the current television viewing habits of the current user – col. 9, line 65 – col. 10, line 3.

As for claim 48, Labeeb and Zigmond disclose the claimed limitations. In particular, Zigmond teaches said detecting when current interactions with the television deviate from the session profile generated to that point includes comparing at least a portion of the category profiles that make up the current interactions with corresponding portions of category profiles that make up the session profile generated to that point. Zigmond teaches that the current interactions are compared to the current and past viewing habits (category profile). Therefore, the identity of the users is continuously determined – col. 9, line 65 – col. 10, line 3.



As for claim 49, Labeeb and Zigmond disclose the claimed limitations. In particular, Zigmond teaches wherein said comparing at least a portion of the category profiles includes applying weighting factors to the category profiles. Zigmond teaches that a best estimate is made of the identity of the user. To make an estimate, weighting factors need to be applied – col. 9, line 65 – col. 10, line 3.

As for claims 11 and 50, Labeeb fails to teach wherein said detecting a termination includes:

- iteratively correlating the session profile to a plurality of pre-existing signature profiles;

- matching the session profile to one of the plurality of pre-existing viewing signature profiles having the highest correlation if the correlation is above a predefined matching threshold;

- iteratively correlating the session profile to the matched signature profile;

- terminating the viewing session when the session profile deviates beyond a pre-determined termination threshold from the matched signature profile.

In an analogous art, Zigmond teaches:

- a) iteratively correlating the session profile to a plurality of pre-existing signature profiles; – (Whatever is currently being viewed is iteratively compared to whatever is stored at the statistics collection location to iteratively identify the current viewer - col. 9, line 65 – col. 10, line 3)

b) matching the session profile to one of the plurality of pre-existing viewing signature profiles having the highest correlation if the correlation is above a predefined matching threshold- (The current session is compared to the profiles which already exist in the statistics collection location to make a correlation and a best estimate to determine the current user. col. 9, line 65 – col. 10, line 3);

c) iteratively correlating the session profile to the matched signature profile (The session profile is iteratively correlated with the matched signature profile to determine if the current viewing session is over or not - col. 9, line 65 – col. 10, line 3);

d) terminating the viewing session when the session profile deviates beyond a pre-determined termination threshold from the matched signature profile –(When a new identity is detected based on a change in viewing habits from the previous user, the viewing session for the previous user is terminated - col. 9, line 65 – col. 10, line 3).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Labeeb's invention to include steps a) – d), as taught by Zigmond, for the advantage of knowing who the current user is at each instant.

As for claim 51, Labeeb and Zigmond disclose the claimed limitations. In particular, Zigmond teaches iteratively correlating the session profile to a plurality of pre-existing signature profiles includes correlating at least a portion of the category profiles that make up the session profile with corresponding portions of category profiles that make up the plurality of pre-existing signature profiles. Zigmond teaches that the

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viewing session is iteratively correlated with the profiles of the users to know who the current user is at each instant - col. 9, line 65 – col. 10, line 3.

Claims 52, 54, and 58 contain the limitations of claim 49 and are analyzed as previously discussed with respect to that claim.

As for claim 53, Labeeb and Zigmond disclose the claimed limitations. In particular, Zigmond teaches wherein said iteratively correlating the session profile to the matched signature profile includes correlating at least a portion of the category profiles that make up the session profile with corresponding portions of category profiles that make up the matched signature profile. Zigmond teaches that the current viewing session is iteratively compared to the profile to which it is matched to ensure the identity of the user.

As for claim 55, Labeeb teaches receiving specific content for display on the television based on the session profile – [0233] – [0244].

As for claim 56, Labeeb fails to teach:

correlating the session profile with advertisement profiles;

selecting an advertisement associated with highest correlation advertisement profile for display on the television;

In an analogous art, Zigmond teaches:

a) correlating the session profile with advertisement profiles – col. 12, line 60 – col. 13, line 5, col. 11, lines 30-49;

b) selecting an advertisement associated with highest correlation advertisement profile for display on the television – col. 12, line 60 – col. 13, line 5, col. 11, lines 30-49;

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Labeeb's invention to include steps a) – b), as taught by Zigmond, for the advantage of displaying an advertisement which is likely to be of interest to the user.

As for claim 57, Labeeb and Zigmond disclose the claimed limitations. In particular, Zigmond teaches wherein said correlating includes correlating at least a portion of the category profiles that make up the session profile with corresponding portions of advertisement profiles. Zigmond teaches that the programming descriptions of the television programs are correlated with the ad selection criteria to display an advertisement relevant to the television program to provide effective advertising – col. 12, line 60 – col. 13, line 5, col. 11, lines 30-49.

15. Claim 72 is rejected under 35 U.S.C. 103(a) as being unpatentable over Labeeb as applied to claim 71 above, and further in view of Alexander.

As for claim 72, Labeeb teaches wherein the entity preferences include at least some subset of viewing duration (viewing time [0220]) however fails to teach wherein it includes some subset of dwell time, holding factor, and volume level.

In an analogous art, Alexander teaches wherein the entity preferences include volume levels for the advantage of collecting profile information about the user – col. 28, lines 29-50.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Labeeb's invention to include wherein the viewing habits include volume levels, as taught by Alexander, for the advantage of collecting profile information about the user.

16. Claim 84 is rejected under 35 U.S.C. 103(a) as being unpatentable over Labeeb as applied to claim 83 above, and further in view of Cottam (6049695) and further in view of Alexander.

As for claim 84, Labeeb teaches wherein said means for generating the profile captures at least some subset of:

viewing duration for networks ([0087]), program genre ([0066]), and programs ([0051]);

channel change frequency – ([0220]);

However, Labeeb fails to teach generating the profile captures at least some subset of dwell time and holding factor for channels, networks, program genre, and programs; and surf order and volume level;

In an analogous art, Cottam teaches identifying the approximate length of time (dwell time and holding factor) spent on viewing a program – col. 6, lines 54-58.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Labeeb's invention to include identifying the approximate length of time spent on viewing a program, as taught by Cottam, for the advantage of tracking how long a viewer viewing a program.

However, Labeeb and Cottam fail to teach generating the profile captures surf order and volume level.

In an analogous art, Alexander teaches wherein the viewing habits include channel change order (surf order) and volume levels for the advantage of collecting profile information about the user to generate a user profile– col. 28, lines 29-50.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Labeeb and Cottam's invention to include wherein the viewing habits include channel change order and volume levels, as taught by Alexander, for the advantage of collecting profile information about the user to generate a user profile.

### ***Conclusion***

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17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sumaiya A. Chowdhury whose telephone number is (571) 272-8567. The examiner can normally be reached on Mon-Fri, 9-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Grant can be reached on (571) 272-7292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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SAC



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